DOCUMENT RESUME

ED 229 436 TM 830 340

AUTHOR Trumbull, Deborah
TITLE Research and Consciousness of World Views.
PUB DATE Apr 83
NOTE 19p.; Paper presented at the Annual Meeting of the American Educational Research Association (67th, Montreal, Quebec, April 11-15, 1983).
PUB TYPE Speeches/Conference Papers (150) -- Viewpoints (120) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Diffusion (Communication); *Educational Research; *Global Approach; Hypothesis Testing; *Information Dissemination; Models; Research Design; Research Methodology; *Research Utilization; *Theories
IDENTIFIERS *Qualitative Research; *Quantitative Research; World Hypotheses (Pepper)

ABSTRACT

Two issues of concern in education are addressed: (1) how should educational research be carried out and (2) why do practitioners so often fail to heed the findings from educational research? The author uses the conceptualization of Stephen Pepper which distinguished four different hypotheses about the nature of the world (formism, mechanism, contextualism, and organicism) to suggest that different approaches to educational research are undergirded by different and conflicting hypotheses about the nature of the world. Thus, while some argue that different approaches to research which may be characterized as quantitative and qualitative can be effectively merged, this paper argues that such fusion may in many cases not be possible in any meaningful way. It is suggested that much educational research is impelled by a world hypothesis in conflict with that which seems to be held by practitioners, thus contributing to the lack of dialogue between researchers and practitioners. (Author/PN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED229436

Research and Consciousness of World Views

Deborah Trumbull, Graduate Assistant

University of Illinois
Department of Educational Psychology
210 Education, 1310 S. Sixth
Champaign, Illinois
61820

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

D J Trumbull

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Draft Copy: Not to be quoted or copied without permission of the author.
Printed in U.S.A.

TM 830 340

RESEARCH AND CONSCIOUSNESS OF WORLD VIEWS

How should educational research be done?
Why do practitioners so often fail to heed the results of educational research?

These are two questions which appear repeatedly in educational writings. These are important questions and ones which, to me, appear related. In this paper I shall argue that different approaches to educational research are, to varying degrees, informed by different views of the world and that the world views held by researchers and practitioners are not always compatible, thus limiting communication and mutual understanding.

In this paper I shall consider first one way in which questions about research approaches have been addressed. I shall then present a summary of different world hypotheses as described by Pepper (1942) and relate these to different assumptions about and approaches to research. Last, I shall describe apparent differences between the world views in research and in practice.

Characterizations of Different Research Approaches

The discussion concerning approaches to research is frequently framed as a distinction between qualitative and quantitative research. Such a dichotomy, however, generally fails to lead to an elucidation of some of the important issues and may in fact obscure some of these issues. On its most unsophisticated level, use of the terms qualitative and quantitative focuses attention solely on the kinds of data gathered, qualitative research being that which gathers nonnumerical data. On a more sophisticated level, the focus is on the methods used to gather data. Quantitative research is characterized as relying on data gathering methods which use standardized instruments which will yield results that can be repeated. Qualitative research is then chracterized as relying more on the human researcher to gather and interpret data.

This second characterization of the approaches to research can then lead to a consideration of the different epistomological assumptions of each. House (1981) described some of the major epistomological differences in approaches to evaluation, differences which apply also to other areas of educational inquiry.

Louis (1982) noted that the qualitative versus quantitative distinction has been used to refer both to data gathering, kinds of data, and data analysis techniques, statistical analyses being appropriate to quantitative research only. She too regarded the qualitative-quantitative dichotomy as less than adequate and proposed rather that attention be given to the amount of structure imposed during the course of the study, thus establishing a continuum rather than a dichotomy. Open-ended interviews, for example, have far less structure than do fixed response questionnaires. Louis also noted that structuring occurs at three aspects of a study: when the data are collected, when the raw data are transformed to produce the data based used, and during the actual analysis procedures. She identified four ways in which a study can incorporate more and less structured methods.

Others have also argued that a fruitful combination of qualitative and quantitative research can be achieved (e.g. Cook and Reichardt, 1979). Herriott and Firestone (1983) noted the federal pressure during the 1970's for studies "that could overcome some of the weaknesses of large quantitative evaluations without being limited by the particularism of single-site case studies. Like many hybrids, it is today quite robust" (p. 14).

As I hope to illustrate in this paper, there may be some fundamental distinctions between different research approaches which render true hybridization difficult if not impossible. While the above formulations are helpful, they obscure these distinctions.

World Hypotheses

In order to suggest what some of these fundamental distinctions might be, I am using work of Stephen Pepper published in 1942. In World Hypotheses: A Study in Evidence Pepper described four different views of the world which are in use in philosophy today. Pepper first identified each world hypothesis by explicating what he felt to be its root metaphor. As a philosophical study, Pepper's work is at a high level of abstraction and at this level the four world hypotheses can be seen as mutually exclusive.

While it is a long way from a philosophical world hypothesis to a single educational study, these root metaphors do help to clarify some salient issues in research design and methods. While Pepper stated that individuals are guided by bits and pieces of world hypotheses, I argue that there are still significant differences in dominant world views held by individuals.

Pepper attempted to remain dogmatically undogmatic in his presentation, urging that we attend to each world hypothesis in attempting to understand events in the world. As he wrote, "Four good lights cast fewer shadows when the sun is hid, but each man has to do his own walking" (p. 342). He asserted further that, "it is illegitimate to disparage the factual interpretations of one world hypothesis in terms of the categories of another - if both hypotheses are equally adequate. This disparagement is an almost universal procedure, very plausible and entirely fallacious" (p.98).

Using this criterion, most of the debate over approaches to research, when these approaches are guided by different world hypotheses, is misguided. This may account for the failure of most of these debates to reach any clarification or resolution. We will be better served to consider the adequacy of research governed by different world hypotheses.

I think that many difficulties in conceiving of and carrying out research in education may be due to an unacknowledged mixing of incompatible world hypotheses. Clarification of such difficulties requires a meta-thinking, a thinking about the research thinking which would tease out the contradictory assumptions which engender the difficulties. Such meta-thinking requries a certain flexibility in thought which is of course difficult since we tend to not notice the dominant world hypothesis within which we are operating, the glass through which we are examining the world.

A world hypothesis is a structural hypothesis, an elaborate theoretical framework which orders and makes sense of the observed facts. Each world hypothesis has its own definition of what is considered fact and what is considered interpretation. While Pepper described each world hypothesis as discrete, he also showed how one world hypothesis can metamorphose into another when definitions are pushed.

The root metaphors on which Pepper based his four world hypotheses are derived from common sense uncriticized knowledge. Refinement and elaboration of each root metaphor gives rise to the categories important in each world hypothesis and the definitions of truth employed. The first two world hypotheses are analytic, the last two synthetic.

FORMISM

The root metaphor for Formism is similarity, the similarity for example of the 1,000 pots thrown by an apprentice Japanese potter according to an image in his mind. The categories of Formism are;

a) Forms, which consist of norms and their characteristics and the laws which govern the ways the characteristics interact.

b) Basic Particulars, an abstraction referring to those particulars which embody a norm. A basic particular is of necessity an abstraction for we cannot observe a particular free of any characteristics.

c) First degree participations, the basic particulars and the characteristics they possess.

The notion of a norm or ideal type, whether it be Platonic or Aristotelian, suggestssome force which shapes the instantiations in the concrete world toward as nearly perfect an expression of the norm as possible. Were it not that there were other laws governing various of the characters part of the norm, each first degree participation, each actualization of the norm, would be identical to all others.

Formism employs a correspondence theory of truth, recognizing two levels of truth. Historical truth is concerned with accurate description of things as they occurred. Scientific truth seeks to determine underlying nroms and laws of nature governing these occurrences. Formism, as Pepper described it, is concerned with particular and discrete aspects of the world. If concern becomes directed toward determining general laws with universal applications, Formism shifts into the next world hypothesis, Mechanism.

Research Implications of Formism

It seems reasonable to say that the assumptions of Formism undergird much of our educational research. We seek to determine the characteristics of a typical seven-year-old or a high school algebra student . This search implies a belief in regular and repeated types which are seen as reflections of some ideal type or norm. The search for the type or average may mean that differences between individuals are conceived of only as variations from the norm and thereby accorded little importance. Much statistical analysis focuses on norms and central trends and ignores the outlyers, treating deviations as accidental fluctuations.

It is relevant and logical to insert here that a positivistic conception of facts is frequently employed in Formism. Pepper noted that, because positivism focuses on data about which many observors can agree (multiplicative corroboration) positivism seems to assume repeatability and similarity. This implies then a Formistic world hypothesis. While many positivists asserted that they were making no metaphysical claims, this is evidence of the way in which epistomology and metaphysics are intertwined.

Respecting Pepper's caveat, we can criticize much educational research within a Formistic perspective from that perspective by first questioning the historical truth of the research. Historical truth requries that events be portrayed as they transpired. From these portrayals one extracts the patterns and regularities which indicate the underlying norms and laws. Much of research in education has concentrated on gathering information on a small number of variables so that the initial description of events is lacking in detail. Thus the empirical regularities and patterns which emerge from these descriptions could be very misleading because they are based on limited range of variables. The variables attended to may not be the significant ones, so may fail to characterize the norms or types encountered.

Also, even though the emphasis in Formism is on the norm, this world hypothesis acknowledges that the characters involved in a particular instantiation are regulated by various laws which will affect its development. Researchers examining only a few variables will ignore these other characters and their development.

Thus, one can criticize this research for lack of sufficient detail to idenfity properly norms and laws. This is the criticism C. Wright Mills makes when he excoriates Grand Theorizing which focuses researchers' attention on a narrow range of variables identified as important by some grand theory.

MECHANISM

When one begins to search for overarching laws which can be applied to the entire world, one enters the world hypothesis of Mechanism. The root metaphor is, of course, the machine. For my purposes here I will use Pepper's illustration of a Newtonian machine, the lever. Imagine a lever which is being used to pry a stump from the ground. From this image Pepper derived the six categories of Mechanism. These categories are;

One) the important locations on the lever, which are the fulcrum and places where forces are applied.

Two) the primary qualities at each location, the weight of the stump and the force being directed against it.

Three) the laws governing the relations of the primary qualities at their respective locations.

Four) the secondary qualities which are associated with the machine but which are not involved in explaining its operation. These include such things as the texture of the tree stump, the smell of the bark.

Five) the relations between the primary and secondary qualities.

Six) the laws, if any, which govern the regularities among the secondary qualities.

The first three categories are necessary to understanding the workings of the machine, but there are other aspects of the situation which are not captured by these categories. In Mechanism, if a given intelligence knew at any one time

> all the forces by which nature is animated and the respective positions of the entities which compose it, . . . [it] would embrace in the same formula the movements of the largest bodies in the universe and those of the lightest atom: nothing would be uncertain for it, and the furture, like the past, would be present to its eyes.
>
> (Laplace, quoted in Polanyi, p. 140)

A major problem for Mechanism is the relationship between the primary and secondary qualities for as humans, we perceive only secondary qualities so must infer the workings of the primary qualities. This sep ration of primary and secondary qualties extends inself into the subject/object dualism and on into the mind/body dualism.

This separation of primary and secondary qualities and the resulting problem of understanding their relationship has produced difficulties in forming a definition of truth in this world hypothesis. Earlier Mechanists took a correspondence view of truth but Pepper regarded this as a remnant of Formism. A correspondence view of truth is a problem because humans can know only secondary qualities according to this view, so correspondence to primary qualities seems impossible to establish.

Other Mechanists employ a pragmatic definition of truth which Pepper identified as being proper to Contextualism, the next world hypothesis. Still other Mechanists adopt a causal-adjustment theory of truth. Truth occurs when a person's physiological attitudes are correctly adjusted to the environment. One can recognize a nail, one knows there is a nail, because on another occassion one stepped on a nail which produced various chemical and physical changes which resulted in pain. Pepper then noted though that this definition of truth requires repitition which leads back to Formism.

Research Implications of Mechanism

There seem to be strong hints of mechanism influencing educational research. Some researchers write as though they were looking to find all-embracing laws capable of predicting events in all situations.

The dualism of mechanism, the separation between primary and secondary qualities, haunts many lines of investigation, involving as it does the image of a hierarchicially arranged world. To study any phenomenon then requires getting to the bottom of things, looking for the root causes, the underlying principles. This image of a hierarchy assumes lower fundamental levels which drive the events in the higher levels and are uninfluenced by them.

Polanyi wrote of this problem in his considerations of emergence:

> lower levels [primary qualities] do not lack a bearing on higher levels; they define the conditions of their success and account for their failures, but they cannot account for their success, for they cannot even define it.
>
> (p. 382)

Polanyi used an internal combustion engine to illustrate this. While the atomic proporties of the metals involved will explain how they behave as metals, the atomic laws do not explaine the functioning of the machine.

It is possible to criticize Mechanistic research within the world hypothesis. When researchers seek to produce such things as general laws of learning, they are dealing with secondary qualities only. Their work can thus be seen as premature for the underlying physiological changes, the chemical and physical changes in the brain, are not yet known. Attempts to ground learning in these changes have not yet proved successful, but to attmept to produce laws based on secondary qualities is a hopeless endeavor at best.

CONTEXTUALISM

As analytic theories, both Formism and Mechanism seek to break things down, to bare the important components which are involved in the laws and/or forms. The last two world hypotheses, Contextualism and Organicism, are synthetic world hypotheses which seek to study a whole rather than its constituent parts. Pepper noted that is it hard to come up with root metaphors for these last two world hypotheses which are as illustrative as were the root metaphors for Formism and Mechanism. He used the historical event as the common sense starting point for these last two hypotheses, noting that it is not the historical event as understood by common sense.

As is Formism, Contextualism is a dispersive theory, concerned with small and limited aspects of the world, with parts of an unsystematic universe. The first two categories of Contextualism are;

a) Change
b) Novelty

There is no assumption that things will be tomorrow as there were today or yesterday. Novel events, totally unrelated to anything now existing, can occur. Or, also a novelty, there may be no change, things may stay the same.

The last two categories in Contextualism are;

c) Quality
d) Texture

The quality of an event is its intuited wholeness. While the concept of time is useful for ordering and schematizing events, it is not considered a real category. Each event, while it exists in a specious present, contains within it past and future.

Most systematic analyses, unless perhaps done for philosophic or aesthetic purposes, ignore the quality of the event, although functioning humans generally attend to the quality of the event. The details and relations of the parts which make up the quality of an event are its texture. The textures of an event fuse to make up the quality of the whole so that when we focus on aspects of the texture of an event we loose sight of its quality, its wholeness. Polanyi described this focusing:

> When we use a hammer to drive in a nail, we attend to both nail and hammer, but in a different way. We watch the effect of our strokes on the nail and try to wield the hammer so as to hit the nail most effectively. When we bring down the hammer we do not feel that its handle has struck our palm but that its head has struck the nail. Yet, in a sense we are certainly alert to the feelings in our palm and the fingers that hold the hammer. They guide us in handling it effectively, and the degree of attention that we give to the nail is given to the same extent but in a different way to these feelings. The difference may be stated by saying that the latter are not, like the nail, objects of our attention, but instruments of it. They are not watched in themselves; we watch something else while keeping intensely aware of them. I have a subsidiary awareness of the feeling in the palm of my hand which is merged into my focal awareness of my driving the nail.
>
> (p. 55, italics the author's)

The quality of an event determines its limits, its extent in time. As an event develops in time, changes occur as emphases shift and new textures are added. The textures of an event consist of strands or elements which each have their own histories and connections. Each texture also has a context which serves indirectly to determine its nature.

The cosmology of Contextualism is esentially a horizontal one, for if one traces the history or development of a particular strand in the texture of an event, one is soon carried beyond the event studied and into another context, another fusing. There is not getting to the bottom of things for there is no bottom. "For Contextualism, element analysis is intrinsically distortive " (Pepper, p. 248). "It follows, moreover, that there are many equally revealing ways of analyzing en event, depending simply on what strands you follow from the event into it context. . . . Serious analysis for him [the Contextualist] is always either directly or indirectly practical (whence the term 'pragmatism')" (p. 250).

Apparently similar cases appear so only because the investigator is looking for similarity. One eight-year-old might appear similar to other eight-year-olds because the investigator is attending to those aspects which are similar. Were one to look at the same children from another perspective, their similarities would vanish.

Pepper identified three definitions of truth used by Contextualists. The first two were named by C.W. Morris "successful working" and "verified hypothesis." The third Pepper referred to as "qualitative confirmation." The first definition has garnered much criticism, and can be easily dismissed. The successful working view holds that that which works is true. Truth is thereby limited to what is, to what has happened. and allows no basis for positing different future possibilities. What will be is controlled by what has been.

The verified hypothesis definition of truth remedies this. If one makes a hypothesis about what <u>will</u> work in a given situation, if it in fact does work the hypothesis is verified and therefore true. Pepper allowed that an hypothesis may be supported, not by successful working only, but also indirectly by other supporting evidence. Neither of these two definitions of truth claim to mirror nature but only to function as tools to control it. In the qualitative confimation definition of truth, the hypothesis is seen to be constructed based on what the investigator knows of the event's quality and textures, and fused proporties of the elements of the event. Because of this, that which is confirmed can be said to reflect aspects of the event studied. This view of truth is moving toward a correspondence view.

A Conetxtualist is concerned only with isolated events. If his focus creeps wider, truth may become fullblown correspondence or coherence or causal adjustment.

Research Implications of Contextualism

It seems that to some degree research approaches sometimes referrred to as hypothesis-generating (e.g. Burden, 1982) are influenced by a Contextualist world view. This includes case study research and ethnographic research. The emphasis is, of course, on the individual case and much is written about the task of setting boundaries to the case. This is not trivial matter, for, as indicated earlier, the textures of an event can be traced in an infinity of directions. It is difficult to capture the wholeness or Quality of an event. Virginia Woolf appeared to grapple with this problem in much of her writing.

> I mean to eliminate all waste, deadness, superfluity: to give the moment whole; whatever it includes . . . . Waste, deadness, come from the inclusion of things that don't belong to the moment: this apalling narrative business of the realist; getting on from lunch to dinner: it is false, merely conventional. (p. 209)

Yin (1982) also noted that in social science there are many situations studied in which the phenomenon studied was very difficult to seperate from its context, that in fact there were few agreed upon procedures for dealing with such situations. This view appears to approach the consideration of the Quality of an event, the fusion of elements central to Contextualism.

An important implication of Contextualism is that there is no one right way to study or analyze an event. Because the various aspects making up an event each have their own histories, contexts and qualities, a researcher must choose the apsects she wishes to study, recognizing that this does involve choice and that there are other ways to study the same event. The researcher studies a specific case for a specific reason, with a particular purpose or problem in mind.

Two of the views of truth employed by Contextualism involve some action in the situation so that Contextualism appears oriented to actual practice. The researcher is part of the event and verifies her ideas by acting within that event.

Because Contextualism emphasizes the singular event, there is no automatic acceptance that what is found true in one event will apply in another. Certainly it would be nice were this to be found, but Change and Novelty are expected.

Pepper noted , however, that Contextualists frequently sound as though they were broadening the scope of their considerations, although he remarked that if challanged they would disavow this. This tendency appears in Glaser and Strauss (1967). They offer a thorough explication of a way in which a particular event can be studied to yield concepts which serve to explain that event. They then, in discussing their notion of theoretical sampling, urge studying these concepts in markedly different contexts, thus ignoring potential differences between the events. This action also does not allow the researcher to be a part of the next contexts in the way in which she was part of the old, so that truth begins to take on a correspondence definition.

David M. Smith (1981) offered a succint statement which fits with Contextualism.

> Ethnographers cannot view the primary goal of research as the production and delivery of goods [e.g. new knowledge] , but rather as the facilitation of productive interactions between various kinds of persons comprising the educational establishment that will result in increased mutual understanding . . . (p. 73).

ORGANICISM

While Organicism shares with contextualism the root metaphor of the historical event, historic events are considered in relation to each other as part of a grand whole rather than as separate and isolated happenings. The categories in Organicism are;

a) fragments
b) nexuses
c) contradictions
d) organic whole
e) implicitness
f) transcendence
g) preservations

Pepper related these categories as follows. Fragments of experience appear as part of nexuses or webs of connections which push for integration. There will be apparent contradictions and gaps in knowledge and oppositions to resolutions but eventually when enough is known all parts will fit into an organic whole which will then be seen to have been implicit in the fragments. This organic whole will transcend the previous contradictions by means of a coherent totality which economizes yet preserves all the elements seen previously as contradictory.

Pepper referred to the first three categories as progressive ones which culminate in the fourth, the organic whole. However, the organic whole and the following three categories are ideals and, while continually sought, will never be reached by humans. Pepper used as the illustration of organicism the classical history of astronomy, wherein more and more seperate facts have been related and understood in terms of increasingly larger wholes.

In Organicism, truth is evidenced by coherence. The truer the theory, the greater its scope, inclusiveness and determinateness. Time is unimportant for the specious present is but in instant in the working out of truth and when this arrives, when there is an absolute organic whole, the specious present disappears. There is a contradiction though, for when there is an absolute organic whole, those elements of the specious present "suspense, distrust, longing, all forms of desire, frustration, all pain, and perhaps all pleasure . . ." will also disappear. Thus, the absolute fails to preserve all the fragments of experience known to us.

Research Implications of Contextualism

It appears that researchers seeking to use multisite case studies are guided, at least in part, by Organicist notions. Many of these efforts (e.g. Stake and Easley, 1978) seek to collect extensive information about several different particular sites and then combine and integrate this information to yield a coherent whole. Since the aim of Organicism is an integration of seemingly disparate and even contradictory parts, the researcher is required to collect as much information as possible, with the belief that it can be integrated into a whole. Since Organicism, like Contextualism, is a synthetic world hypothesis, care must be given to preserve the wholenenss, the Quality, of the individual sites studied. A possible problem is that researchers too early limit their inquiries, too early focus on parts of the event rather than trying to capture the whole.

CONCULSION

As I understand these different world hypotheses, it seems the bulk of educational research is guided or shaped by assumptions consonant with Formism and Mechanism. These, as Pepper drew them, are analytic approaches which seek to identify the essential controlling elements or variables. Formism would identify the types and the distinguishing characteristics by which these might be identified and the laws associated therewith. While various laws control the development of the characteristics of each instantiation of a type, the different instantiations are more similar than not. The focus then, is on similarities. Differences can then be dismissed as due to random error; outlyers, to use the statistical language which fits in this world hypothesis so well, can be ignored.

Mechanism, as it influences educational research, gives rise to the hope of discovering primary qualities which underlie the qualities observed, and the laws which control their interactions. These laws will be predictive and useful in all situations. That such laws have not yet been developed in education is ascribed to the infancy of the endeavor. "Fruitful results are expected to occur as more precise instruments are developed, more sophisticated designs created, and more powerful statistical analyses used " (Popkewitz, et al., 1979).

Practitioners, however, as distinguished from researchers, operate in a setting where outlyers are expected or seen to be more prevalent. Practitioners deal with samples for which population statistics seem too often inappropriate. Thus laws or types developed from Mechanistic or Formistic approaches might not be useful.

Perhaps even more basic it that practitioners may hold world hypotheses more dominated by Contextualism. The many factors present in any particular setting act together and interact to form the Quality of the event.

For example, if teachers are given some test data about a problem students and aksed to choose from among four strategies to deal with the student, many reply that they have insufficient data upon which to make a decision. hen asked about the data they would like to have, they respond that they would have to know the student, to know how he related to peers, how he had performed in other classes, how he had related to the teacher in this class, and many other information which concerned, not information about individual variables, but information about the whole child in a complete context. Teachers too respond that information about individual variables, for example reading ability, is close to meaningless without sufficient description of the context and the history of the child.

Practitioners also often emply some Contextualist definitions of truth. They are centrally concerned with what works for them in their setting. Truth is closely tied to their particular setting.

Practitioners then may fail to heed research finding because much research is driven by world hypotheses different from that held by partitioners. Practitioner knowings are rooted in particulars, in contexts which offer a reality composed, not of seperate variables, but of the interaction and fusion of many seperate elements, each with its own history and identity. Any change effort - introduction of new basal readers, use of different laboratory experiments, guidlines for streamlined program managment - must take into account the complex of interacting factors which make up the Quality of the particular and must work to understand that before it can be changed.

REFERENCES

1. Burden, P.R. Teacher Development: Research Strategies. Paper presented at annual meeting American Educational Research Association, New York, March, 1983.

2. Cook, T.D. and Reichardt, C.S. (Eds.), Qualitative and Quantitative Methods in Evaluation Research. Beverly Hills, CA: Sage, 1979.

3. Glaser, R.G. and Strauss, A.L. The Discovery of Grounded Theory. New York: Aldine Publishing, 1967.

4. Herriott, R.E. and Firestone, W.A. Multisite Qualitative Policy Research: Optimizing Description and Generalizability. Educational Researcher, 1983, 12(2), 14-19.

5. House, E. Evaluating With Validity. Beverly Hills, CA: Sage, 1980.

6. Louis, K.S. Multisite/ Multimethod Studies: An Introduction. American Behavioral Scientist, 1982, 26(1), 1 -20.

7. Mills, C. W. The Sociological Ima ination. Oxford: Oxford University Press, 1959.

8. Pepper, S.C. World Hypotheses: A Study in Evidence. Berkeley: University of California Press, 1942.

9. Polanyi, M. Personal Knowledge. Chicago: University of Chicago Press, 1958.

10. Popkewitz, T., Tabachnick, B.R., and Zeichner, K. Dulling the Senses: Research in Teacher Education. Journal of Teacher Education, 1979, 30(5), 52-60.

11. Smith, D.M. Ethnographic Monitoring: A Way to Understanding by those Who are Making Schools Work. The Generator, 1981, 12(2), 69-92.

12. Stake, R.E. and Easley, J.A. Jr. Case Studies in Science Education. Urbana, IL: Center for Instructional Research and Curriculum Evaluation, University of Illinois, 1978.

13. Woolf, V. [The Diary of Virginia Woolf, Volume Three: 1925-1930] (Ann Olivier Bell, Ed.) New York: Harcout Brace Janovitch, 1980

14. Yin, R.K. Studying Phenomenon and Context Across Sites. American Behavioral Scientist, 1982, 26(1), 41-53.

Research and Consciousness of World Views

Abstract

This paper addresses two issues of concern in education: How should educational research be carried out and Why do practitioners so often fail to heed the findings from educational research.
The author uses the conceptualization of Stephen Pepper which distinguished four different hypotheses about the nature of the world to suggest that different approaches to educational research are undergirded by different and conflicting hypotheses about the nature of the world. Thus, while some argue that different approaches to research which may be characterized as quantitative and qualitative can be effectively merged, this paper argues that such fusion may in many cases not be possible in any meaningful way.

It is suggested that much educational research is impelled by a world hypothesis in conflict with that which seems to be held by practitioners, thus contributing to the lack of dialogue between researchers and practitioners.